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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 19463-0002

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____

Signature _____

Typed or printed name _____

Application Number	Filed
10/689,716	Oct. 22, 2003

First Named Inventor: Nelson GONZALEZ et al.

Art Unit	Examiner
2628	Joni Hsu

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [x] attorney or agent of record. Registration number 43,214.
- [x] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 47,818

#47818

Signature

for Ajit J. Vaidya

Typed or printed name

(202) 637-5564

Telephone number

January 16, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

[x] *Total of 6 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	: 10/689,716	Confirmation No.	: 3956
Applicant(s)	: Nelson GONZALEZ et al.		
Filed	: October 22, 2003		
TC/A.U.	: 2628		
Examiner	: Joni Hsu		
Title	: MOTHERBOARD FOR SUPPORTING MULTIPLE GRAPHICS CARDS		
Docket No.	: 19643-0002		
Customer No.	: **24633**		

Mail Stop: AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

SUPPLEMENT TO PRE-APEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicants hereby submit this document in support of the attached Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal Filed in accordance with 37 C.F.R §41.31, along with a request for a three-month extension of time following receipt of a non-final Office Action dated July 14, 2006.

Current Status of the Present Application

Currently, claims 1-7, 29, 30, 32-34, 41, 44-48 and 50-52 remain in the present application. The Office Action rejects these claims under 35 USC §103(a) as being unpatentable over U.S. Published Application No. 20040088469A1 ("Levy") in view of U.S. Patent No. 6,295,566 to Stufflebeam ("Stufflebeam"), further in view of U.S. Patent No. 5,546,530 to Grimaud ("Grimaud"). [Final Action at pages 2-9]. Applicants respectfully disagree with this finding as being both legally incorrect and factually without merit.

Arguments

Applicants suggest:

A) There is no motivation to combine Levy, Stufflebeam, and Grimaud under 35 USC §103(a) except to wrongly recreate in hindsight the present invention as embodied in the pending claims;

B) The Office Action fails to adequately consider Applicants' Declaration under Under 37 C.F.R. §1.132; and

C) Even if Levy, Stufflebeam, and Grimaud could rightfully be combined, the combination

of Levy, Stufflebeam, and Grimaud fails to teach the each and every limitation of the present invention as embodied in claims 1-7, 29, 30, 32-34, 41, 44-48 and 50-52.

A. There is No Motivation to Combine Levy, Stufflebeam, and Grimaud

When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987). In the Action in Section 10 at the bottom paragraph of page 6, it is argued that it would be obvious to combine Levy and Stufflebeam merely because the technologies hypothetically could be combined to improve performance. Applicants respectfully disagree with this finding. Levy relates to a bus for flexibly establishing data lanes, thereby allowing the bus to adjust to connected devices as needed. In contrast, Stufflebeam relates to a computer with PCI slots that are configured to allow additional devices to be inserted and existing devices to be removed or relocated without restarting the computer. It can be seen that Levy and Stufflebeam are directed toward different technical challenges and are in different technical fields. Moreover, it can be seen from the their front pages that the USPTO has placed these references into different US and International technical classes and searched the two references in different classes. There is no suggestion in Levy of adapting the bus technology to any slot technology, nor in Stufflebeam of applying the slot technology for different busses.

Likewise, at the bottom paragraph of page 7, the Action argues that it would be obvious to combine Grimaud with the other two references since Grimaud offers desirable benefits. Applicants wholly disagree with this finding as being entirely unfounded and insufficient. Neither Levy nor Stufflebeam is directed in any way to the graphics performance field of Grimaud. Again, it can be seen from the their front pages that the USPTO has placed these references into different US and International technical classes and searched the three references in different classes. Moreover, Grimaud contains no discussion or suggestion to combine its teaching with other references directed to improved bus and/or slot technology.

B. The Office Action fails to adequately consider Applicants' Declaration Under 37 C.F.R. §1.132

As described in the Declaration Under 37 C.F.R. §1.132 ("Declaration") submitted April 20, 2006, the products implementing the Applicants' invention has achieved significant commercial success in the marketplace and represent a significant advance over the previous state of the art, including Levy and Grimaud. The success of these products is directly related to features claimed in Applicants'

invention. In addition, as described in the enclosed Declaration, there has been significant copying of the Applicants' invention over conventional graphics systems. While Stufflebeam is newly cited following the submission of the Declaration, the same principles still apply - that no comparable devices existed prior to Applicants' conception of the present invention as claimed and that the Applicants have had significant commercial success and copying by others. In response, the Action cites to Grimaud in support of the proposition that multiple graphic processors systems are quite known. This response fails to address Applicants evidence that motherboards having multiple high-speed graphics slots, particularly having a scalable bas system, simply did not exist prior to Applicants' conception and commercialization of the present invention as claimed. In particular, the Action cites to a single line in the Grimaud specification regarding the addition of processors through available slots. Applicants readily admit that multiple graphic processor systems are known and existed prior to the conception of the present invention, but argue that these systems used multiple processors on a single slot (i.e., multi-processor video cards) or where processors resided both on the motherboard and on a board added through a single slot. Even, assuming, *arguendo*, that multiple graphics processors may be connected to a motherboard via expansion slots, this does not address the present invention's claimed multiple high-speed graphics slots. As discussed in the Declaration, this advancement did not exist prior to the present invention, provides significant technical benefits, has been met with significant commercial and critical success, and has been widely copied.

C. The combination of Levy, Stufflebeam, and Grimaud fails to teach the each and every limitation of the present invention as embodied in claims 1-7, 29, 30, 32-34, 41, 44-48 and 50-52

As described in the application, the invention provides a novel and non-obvious motherboard that accepts multiple high performance video cards and coordinates those multiple high performance video cards to provide improved video performance to a display device. As described in the specification of the present application, it is highly desirable to provide a motherboard having multiple high-speed video card slots that are capable of receiving high performance video cards that can then be operated in parallel. In this way, the invention allows the leveraging of multiple standard, off-the-shelf video cards.

The Office Action states that Levy discloses high speed video card slots including at least one first video card slot and a second video card slot. However, Levy merely states that the attached devices may include "video cards" Applicants submit that Levy fails to disclose or suggest "a plurality of high speed video card slots ...including at least one first video card slot and second video card slot," as recited

in claim 1. Further, Levy does not provide any disclosure regarding the attachment and operation of two or more high speed video cards. Levy also does not provide any disclosure regarding slots for receiving multiple high speed video cards. The Office Action incorrectly interprets above quoted section from Levy as disclosing a plurality of high speed video card slots. However, Levy only suggests examples of components useable on a motherboard but does not teach of suggest the features of claim 1. In order for a reference to anticipate a claim or render a claim obvious, it must enable the subject matter that it is alleged to cover. Levy does not provide any disclosure that would enable the features of claim 1. Therefore, Applicant's submit that Levy does not teach or suggest the features of claim 1 as described above.

Moreover, Applicants submit that the combination of Stufflebeam and Grimaud do not make up for the deficiencies in Levy. As described above, Stufflebeam merely addresses a configuration for adding or removing devices without turning off a computer. There is no suggestion in Stufflebeam that the invention further related to enhancement of motherboard design to include a previously unknown feature of multiple video card slots. In particular, Stufflebeam, similar to Levy, merely provides that video cards can be added to a motherboard through the disclosed slots, but does not provide that multiple video cards can be concurrently connected to a motherboard or that the motherboard provides multiple high-speed video card slots as specified in Claim 1.

Likewise, as described above, Grimaud specification contains a single passage regarding the addition and coordination of graphics processors through available slots. There is no further suggestion or teaching in Grimaud that the computer contains multiple high-speed video card slots or the concurrent connection of multiple video cards. As previously presented, the tern "video card slot" has a very well defined meaning in the computer industry (not merely a slot for accepting any video card), and none of the three cited references contain the feature of multiple video card slots.

Moreover, the Office Action fails to address Applicants' argument that several of the dependent claims (*inter alia*, claim 29) are likewise separately patentable in that Levy does disclose the use of different path widths for two similar devices. While Levy discloses that different path widths may be used for different devices, it never addresses or suggests the use of different path widths for similar devices, let alone video cards as claimed.

EXCEPT for fees payable under 37 CFR §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application, including fees due under 37 CFR §1.16 and 1.17 which may be required, including any required extension of time fees, or credit, any overpayment to deposit account No. 50-1349. This paragraph is intended to be a constructive

petition for extension of time in accordance with 37 CFR §1.136(a)(3). If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1349.

Respectfully submitted,

Date: January 16, 2007 By: _____

Ajit J. Vaidya
Registration No. 43,214

David D. Nelson
Registration No. 47,818

Hogan & Hartson, LLP
555 Thirteenth Street, N.W.
Washington, D.C., 20004
Telephone No.: 202-637-5564
Facsimile No.: 202-637-5910
e-mail: ajvaidya@hhlaw.com
Customer No. 24633